

Comparison: Claims of Already Registered Pesticides versus OxO Chestnut

The description of the purpose of the OxO chestnut is similar to claims made for many currently registered pesticides. Those listed here are only a representation of these product claims. A determination that OxO chestnut is a pesticide would not affect OPP's current programs. A decision that it is not a pesticide, would have ramifications for current and future chemical, biochemical, anti-microbial, microbial and PIP pesticide registrations.

EPA provides the following guidance on its website regarding mitigation, "If the context of the claims on a product's label, labeling, or by other means appear to imply or express that the product mitigates a pest, directly or indirectly, either by itself or by removing the pest's food, food source or its habitat, then the product would be considered to be subject to FIFRA." ([[HYPERLINK "https://www.epa.gov/pesticide-registration/determining-if-cleaning-product-pesticide-under-fifra" \]\]\)](https://www.epa.gov/pesticide-registration/determining-if-cleaning-product-pesticide-under-fifra)

| Product Name | Product Class | Division Regulating | Developer Claim |
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| OxO Chestnut | Anti-fungal (PIP?) | BPPD(?) | By degrading the OA secreted by <i>C. parasitica</i> , the speed of mycelial fan progression could be reduced, thus providing the transgenic trees more time to form a complete wound periderm to wall off the blight fungus and prevent further disease development (from 2013 developer publication) This OxO gene provides dominant blight resistance, meaning that if these trees are crossed with surviving American chestnut trees, half the offspring will inherit the OxO gene and therefore be fully blight resistant (from AFC 2019 website) |
| Actigard 50WG (Azibenzolar) | Chemical Anti-fungal | RD | Used for the control of downy mildew and suppression of black rot of cole crops, downy mildew of leafy vegetables, downy mildew and white rust of spinach, bacterial spot and bacterial speck of tomato and blue mold of tobacco. Actigard 50WG is an inducer of host plant resistance. <u>Actigard 50WG has no direct activity against target pathogens</u> (from pesticide label) |

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| Aliette WDG | Chemical Anti-fungal | RD | <p>Attacks pathogens at various growth stages for better overall disease control. Its unique action not only controls fungi on contact but also stimulates the plant's own defense mechanisms (from pesticide label).</p> <p>Phosphonate fungicides e.g., Aliette (aluminum tris (o-ethyl phosphonate) are absorbed by the plant and incorporated into cells as phosphites. Phosphites trigger production of phytoalexins, part of the plant's natural defense system. Ability of fungus to spread into plant tissues reduced, slowing/preventing fungal growth. (from pesticide label)</p> |
| Innate Potato | PIP Anti-fungal | BPPD | Helps the plant recognize the potato late blight pathogen so that natural plant immune responses are able to protect the plant. (from registrant website) |
| MicroBan GCC | Chemical Anti-fungal/ Mildewstat Anti-bacterial | AD | Inhibits the growth of mold and mildew (from pesticide label) |
| RemedialCon-C | Chemical Anti-fungal/ Mildewstat | AD | This product has been shown to inhibit mold and mildew (from pesticide label) |
| Aspergillus flavus AF36 | Microbial Anti-fungal | BPPD | Competes with strains of Aspergillus flavus that produce large amounts of aflatoxin and in doing so limits the amount of these high aflatoxin producers that become associated with the crop (from pesticide label) |
| X-17 Papaya | PIP Antiviral | BPPD | The availability of Solo-type cultivars tolerant to the PRSV and adaptable to South Florida will help revitalize and further diversify agricultural production in South Florida (from registrant website) |
| Methoprene | Chemical Insect Control | RD, BPPD | Methoprene is an insect growth regulator, or more precisely, a juvenile hormone mimic. Rather than killing insects, it controls them by interfering with normal hormone levels within the insect at critical development periods preventing growth and/or maturation (from registrant website) |

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| Azadirachtin | Chemical Insect Control | BPPD | Initially found to inhibit desert locust feeding, azadirachtin is now known to affect a broad spectrum of over 200 insect species. Azadirachtin's primary mode of action is as an anti-feedant (from registrant website) |
| Oxicide | Chemical Antimicrobial | AD | This product use solution is a one step hospital use disinfectant cleaner and deodorant designed for general cleaning, disinfecting and deodorizing of hard, nonporous inanimate surfaces (from registrant website) |
| Febreeze¹ w/ odor causing bacteria claims | Antimicrobial | AD | The product both masks the odor and controls odor causing bacteria and is registered as an antimicrobial pesticide. |
| Febreeze | Odor Masking Fragrance | None | Masking the odor is not a pesticidal claim. In pesticide products, fragrances are considered inert ingredients. |

¹ The first Febreeze product makes a pesticidal claim and is known to contain an antimicrobial ingredient while the second product only claims to mask odors (a commercially valuable non-pesticidal claim) and does not claim to do anything pesticidal to the odor causing agent. Therefore, regardless of what is in the second product, we don't need to register it because it does not make a pesticidal claim. The OxO chestnut has no commercially valuable use other than mitigating the OA which creates food/habitat for *C. parasitica* to thrive, and the developer's claims are pesticidal.